

## **ABSTRACT**

An apparatus and method are described for normalizing a plurality of state metric values stored in a plurality of accumulators. In one embodiment, normalization logic monitors each of the state metric values. When all of the  
5 values are above a predetermined threshold, the normalization logic subtracts a normalization amount from each of the state metric values. In one embodiment, the normalization amount is incorporated into branch metric calculations at one or more branch metric units. In addition, in one embodiment, different normalization amounts are employed based on the state metric values.